

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 024455PC		FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/CN02/00631	International filing date (day/month/year) 09.Sep.2002 (09.09.2002)	Priority date (day/month/year)	
International Patent Classification (IPC) or national classification and IPC IPC7 C07K14/435 C12N15/12			
Applicant SHANGHAI GENOMICS, INC. et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 02.Apr.2004 (02.04.2004)		Date of completion of this report 04.Jan.2005 (04.01.2005)	
Name and mailing address of the IPEA/CN 6 Xitucheng Rd., Jimen Bridge, Haidian District, 100088 Beijing, China		Authorized officer JIA, Shulin	
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/CN02/00631

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages 1-3,5-15 _____ as originally filed/furnished
 pages * 4 _____ received by this Authority on 21.Oct.2002 (21.10.2002)
 pages * _____ received by this Authority on _____

☒ the claims:

pages 1 _____ as originally filed/furnished
 pages * _____ as amended (together with any statement) under Article 19
 pages * _____ received by this Authority on _____
 pages * _____ received by this Authority on _____

☒ the drawings:

pages 1-6 _____ as originally filed/furnished
 pages * _____ received by this Authority on _____
 pages * _____ received by this Authority on _____

☒ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/CN02/00631**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement:

Novelty (N)

Claims	1,2,4-10	YES
Claims	3	NO

Inventive step (IS)

Claims	1,2,4,5,9,10	YES
Claims	3,6-8	NO

Industrial applicability (IA)

Claims	1-10	YES
Claims		NO

2. Citations and explanations (Rule 70.7)

Document 2: Genomics 79 (1), 114-123 (2002), Radosavljevic, M. et al.,
A cluster of ten novel MHC class I related genes on
human chromosome 6q24.2-q25.3

Claim 3 demands a kind of isolated polynucleotides comprising the polynucleotides which share at least 70 percent identity with the polynucleotides encoding the polypeptides in claim 1.

Document 2 disclosed a sequence of polynucleotide, which shares 94 percent identity with the polynucleotides encoding the polypeptides in claim 1. It is considered that the invention as defined in claim 3 does not appear to meet the criteria mentioned in Article 33(2)PCT, i.e. does not appear to be novel.

Claims 6-8 which depend on the polypeptides in claim 3 are obvious to the skilled persons in the art. It is considered that the invention as defined in claims 6-8 do not appear to meet the criteria mentioned in Article 33(3)PCT, i.e. does not appear to involve an inventive step.

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Supplemental Box Relating to Sequence Listing

Continuation of Box No. I, Item 2:

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this report was established on the basis of:
 - a. type of material
 - ☒ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ in written format
 - ☒ in computer readable form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed
 - ☒ filed together with the international application in computer readable form
 - ☐ furnished subsequently to this Authority for the purposes of search and/or examination
 - ☐ received by this Authority as an amendment * on _____
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

**If item 4 in Box No. I applies, the listing and/or table(s) related thereto, which form part of the basis of the report, may be marked "superseded."*